ribose, (ii) admixing (~~i~~ a) a substance to be tested, wherein said substance is not aminoguanidine, (~~ii~~ b) histone H1, and (~~iii~~ c) ADP-ribose, and determining if said substance to be tested has an effect on glycation of histone H1 by ADP-ribose~~, wherein indication of an effect on said glycation~~ by comparing the levels of glycation in the two assays, wherein a change in effect on glycation as compared to the first assay indicates that said substance regulates glycation.

Claim 2 (original): The method of claim 1, wherein said substance is a dicarbonyl scavenger.

Claim 3 (original): The method of claim 1, wherein said substance is not an antioxidant.

Claim 4 (original): The method claim 1, comprising determining glycation by measuring fluorescence of glycated histone H1.

Claim 5 (currently amended): The method of claim 1, further comprising comparing said effect to the effect achieved by admixing aminoguanidine, to said histone H1, and ADP-ribose.

Claim 6 (currently amended): The method claim 2, comprising measuring fluorescence about 5 days after admixing (~~i~~ a), (~~ii~~ b), and (~~iii~~ c).

Claim 7 (cancelled)

Claim 8 (original): The method of claim 1, further comprising determining cross-linking of molecules of histone H1.

Claim 9 (original): The method of claim 1, wherein said substance is a nucleophilic compound.

Claim 10 (currently amended): The method of claim ~~7~~ 9, wherein said nucleophilic compound is a thiol containing compound.

Claim 11 (withdrawn)

Claim 12 (re-presented – formerly dependent claim7):

A method for determining if a substance inhibits glycation of a protein, comprising (i) admixing (a) a substance to be tested, (b) histone H1, (c) ADP-ribose, and (d) AGE-BSA, and (ii) admixing (a) aminoguanidine, (b) histone H1, (c) ADP-ribose, and (d) AGE-BSA, and determining if said substance to be tested inhibits glycation of histone H1 by ADP-ribose by comparing the levels of fluorescence in the two assays, wherein a decrease in AGE-BSA fluorescence in the presence of said substance indicates that the substance does not inhibit glycation.

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